Slides for MPIA/7X strategic meeting

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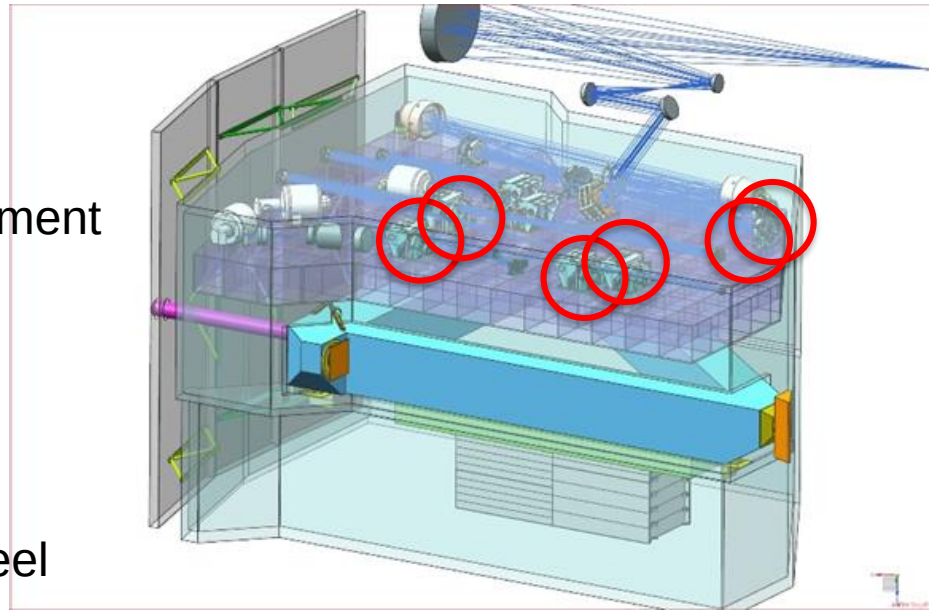
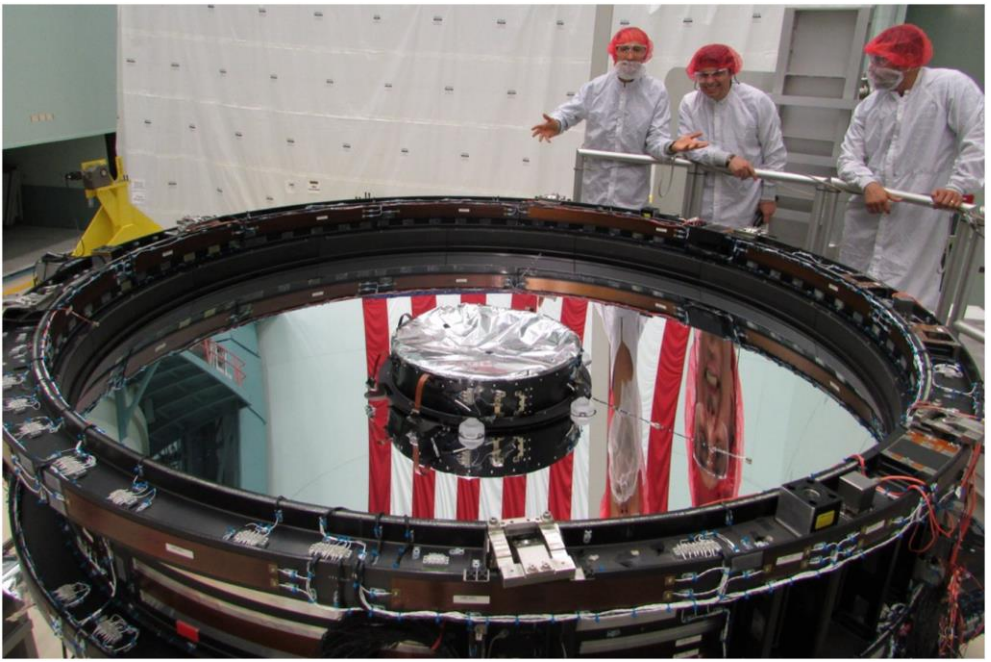
WFIRST @ JPL

- JPL's primary deliverable is the Coronagraph Instrument (CGI)
  - Designed to reach 10^{-9} contrast ratio
  - Technology demonstration for a future 10^{-10} or 10^{-11}coronagraph
- JPL has the science leadership of wide field dark energy survey development
  - Strong scientific and algorithm Euclid synergies
- JPL is participating in near infrared detector validation (Teledyne H4RG)
  - Synergies with Euclid and MPIA leadership



WFIRST CGI with the six proposed MPIA-provided mechanisms (built on JWST/MIRI heritage) circled



The WFIRST 2.4m primary mirror

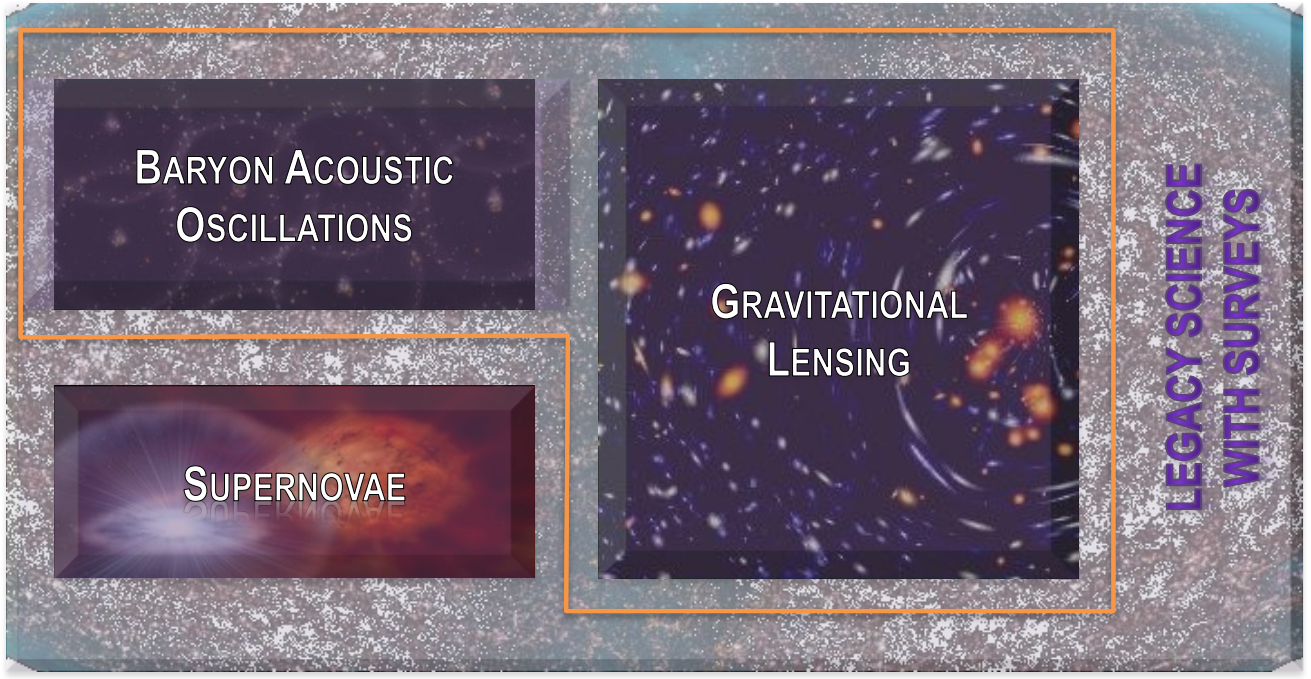
- MPIA provision of six wheel mechanisms for CGI considered a technically and financially compelling contribution
- Henning selected by ESA to be an observer on the WFIRST Formulation Science Working Group

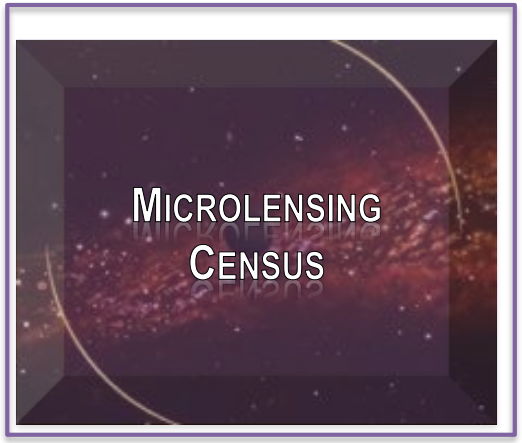
WFIRST Science

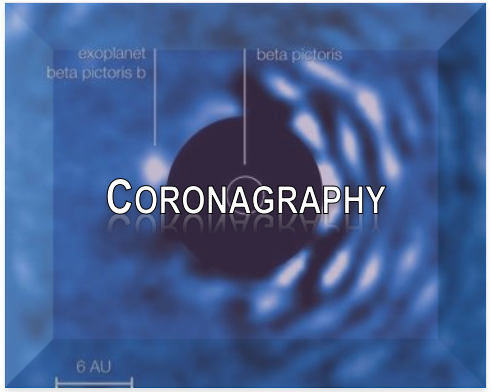
complements Euclid

complements LSST

complements Kepler







continues Great Observatory legacy

Euclid @ JPL

- Pasadena is the nexus of US Euclid activity
  - The Euclid NASA Science Center at IPAC (ENSCI) participates in the Euclid Science Ground Segment and is a node (SDC-US) in the distributed processing and archiving system
    - ENSCI will archive NIR detector test data (from GSFC) and deliver software modules for the SGS pipeline that extracts and calibrates the NIR photometry and spectroscopy
  - The NASA detector procurement (20 Teledyne H2RG Sensor Chip Systems-SCS) is being managed out of JPL
  - Science leadership at JPL and IPAC with 2 of 3 NASA selected teams which together have about 70 US scientists and engineers
    - Efforts in primary weak lensing and galaxy clustering science, galaxy clusters, galaxy evolution, and strong leadership in photo-z calibration and extraction (Keck program with 40 nights for Euclid)
  - Synergy with MPIA scientists on cosmology, galaxy evolution and NIR detector calibration
    - Stefanie Wachter will be moving to Pasadena in summer 2017
    - Would like to strengthen Pasadena/MPI ties in calibration

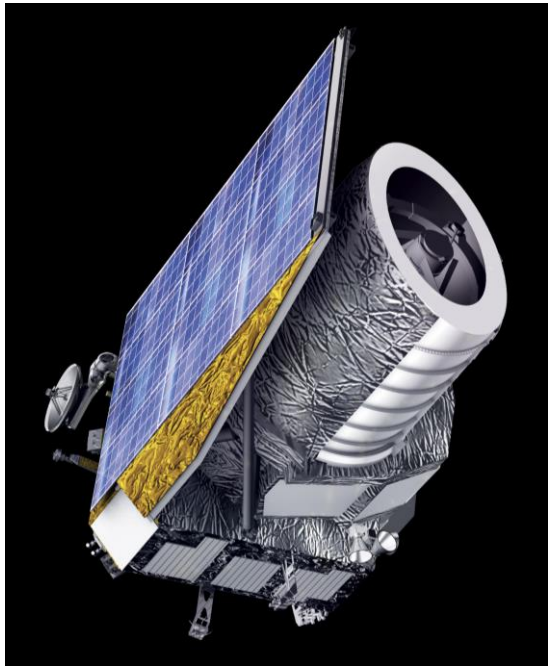


Illustration of Euclid, Scheduled for launch in late 2020